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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/688,872	10/17/2003	Nicholas G.L. Merz	D0000-1005d1	2246
24208	7590	10/18/2005		
ROBERT PLOTKIN, PC 91 MAIN STREET, SUITE 204 CONCORD, MA 01742-2527			EXAMINER LEON, EDWIN A	
			ART UNIT	PAPER NUMBER
			2833	

DATE MAILED: 10/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/688,872

Applicant(s)

MERZ, NICHOLAS G.L.

Examiner

Edwin A. León

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-5,7-10 and 13-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 16-18 is/are allowed.
- 6) ☒ Claim(s) 1, 3-5, 7-8, 10 and 13-15 is/are rejected.
- 7) ☒ Claim(s) 9 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Amendment*

1. Applicant's Response filed August 16, 2005 has been placed of record in the file.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang et al. (U.S. Patent No. 6,383, 024) in view of Okamoto (U.S. Patent No. 6,752,662). With regard to Claims 1 and 3, Wang et al. discloses an electronic device (1) comprising: a housing (52, 51); a first connector (upper part of 51 and 3) comprising: a first cavity (upper 512 and interior of 3) defined by a first outer shell (upper part of 51) integrally formed in the housing (52, 51) and having a first cross-sectional profile of a first plug (Column 2, Lines 22-26) to which the first connector (3) may mate; and a first electrical contact (upper 23) integrally formed with and extending from a component (2) of the electronic device (1) and protruding into the first cavity (upper 512 and interior of

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3); a second connector (lower part of 51 and 4) comprising: a second cavity (lower 512 and interior of 4) defined by a second outer shell (lower part of 51) integrally formed in the housing (52, 51) and having a second cross-sectional profile of a second plug (Column 2, Lines 22-26) to which the second connector (lower part of 51 and 4) may mate; and a second electrical contact (lower 23) integrally formed with and extending from the component (2) of the electronic device (1) and protruding into the second cavity (lower 512 and interior of 4); wherein the housing (52, 51) includes the first connector (upper part of 51 and 3) and the second connector (lower part of 51 and 4). See Figs. 1-3.

Wang et al. doesn't show the component comprising a printed circuit board, the first and second electrical contact being integrally formed in one piece with the circuit board.

Okamoto discloses a similar connector (20) having component (10) comprising a printed circuit board (10) and having an electrical contact (11) integrally formed in one piece with the board (10). See Figs. 1-3.

Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the connector of Wang et al. by having the component comprising a printed circuit board and having an electrical contact integrally formed in one piece with the board as taught in Okamoto in order to reduce the thickness of the connector making it less expensive when manufactured.

4. Claims 4-5, 7-8, 10-11 and 13-15 rejected under 35 U.S.C. 103(a) as being unpatentable over Wang et al. (U.S. Patent No. 6,383, 024) in view of Okamoto (U.S.

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Patent No. 6,752,662) and Tan et al. (U.S. Patent No. 6, 475,021). The combination of Wang et al. and Okamoto discloses the claimed invention as shown above except for the first connector complying with requirements of a first connector standard and wherein properties of the second connector complying requirements of second connector standard that differs from the first connector standard, the first connector standard comprises the Universal Serial Bus standard and wherein the second standard comprises the IEEE 1394 standard.

Tan et al. discloses a similar connector using connectors complying with the requirements of the Universal Serial Bus standard and the IEEE 1394 standard. See Figs. 1A-6, Column 2, Lines 41-51, and Column 7, Lines 25-40.

Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the connector of Wang et al. and Okamoto by making the connectors comply with the requirements of the Universal Serial Bus standard and the IEEE 1394 standard as taught in Tan et al. since it is well known in the art of electrical connectors that this would make the connector more versatile.

### ***Allowable Subject Matter***

5. Claim 9 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims for the reasons stated in the Office Action of July 12, 2004.

6. Claims 16-18 are allowed for the reasons stated in the Office Action of July 12, 2004.

### ***Response to Arguments***

7. Applicant's arguments filed August 16, 2005 have been fully considered but they are not persuasive. In response to Applicant's arguments regarding Claims 1, 7 and 10 that the Wang et al. reference doesn't show a first cavity defined by a first outer shell integrally formed in the housing and having a first cross-sectional profile of a first plug to which the first connector may mate, Applicant's attention is directed to Fig. 1 in which Wang et al. clearly discloses a first cavity (upper 512 and interior of 3) defined by a first outer shell (upper part of 51) integrally formed in the housing (52, 51) and having a first cross-sectional profile of a first plug (Column 2, Lines 22-26) to which the first connector (3) may mate. Applicant is reminded that the Examiner has stated the cavity as being the combination of 512 and the interior of 3. Therefore, part 512 of the cavity is formed integrally in part 51 of the housing, and the interior of 3 has a cross-sectional profile of a plug, which is what is required on Applicant's claims. The claim does not call for the entire cavity to be integrally inside the housing or the entire cavity to have a cross-sectional profile of a plug. It is the Examiner's opinion that the Wang et al. reference meets Applicant's claims in their broadest interpretation.

***Conclusion***

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

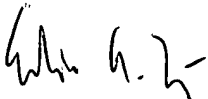
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edwin A. León whose telephone number is (571) 272-2008. The examiner can normally be reached on Monday - Friday 10:00-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on 571-272-2800, extension 33. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Edwin A. Leon  
AU 2833

EAL  
October 13, 2005



TRUCT. NGUYEN  
PRIMARY EXAMINER